

**REMARKS**Claim Status

Claims 1-17 are pending in the application. This paper adds new dependent claims 18 and 19. Claims 1, 5, 6, 10, 11, and 15-17 are the independent claims of the application.

Art Rejections

The Final Office Action rejected claims 1-17 under 35 U.S.C. § 103(a) as being unpatentable over Gilbert *et al.*, U.S. Patent Number 6,016,311 (“Gilbert” hereinafter). Applicants respectfully traverse the rejections and request reconsideration for the following reasons.

Independent claims 1 recites the step of “synchronizing frames across plural time division multiple access (TDMA) channels between a base station and a plurality of CPEs so that upstream frames and downstream frames coincide across the plural channels.” Independent claims 6, 11, and 16 recite identical or similar limitations. Regarding independent claims 1, 6, 11, and 16, the Office Action acknowledged that “Gilbert fails to explicitly disclose [that] frames across the plural time division multiple access (TDMA) channels are synchronized between a base station and CPEs.” The Office Action then noted Gilbert’s teaching of “transmissions and receptions of all base stations 106 within a cluster 160 are preferably synchronized” at column 13, lines 48-50. The Office Action reasoned that “[t]his statement must also imply the transmission between the base station 106 and

the CPEs within a cell 102 must also preferably synchronize.” The last conclusion does not follow from Gilbert’s disclosure.

As the Office Action recognized, Gilbert discloses synchronizing transmissions from multiple base stations to reduce co-channel interference. It appears, however, that multiple channels do not need to be synchronized to each other. Consider, for example, hypothetical first and second cells each having channels A and B. The base station transmissions on channel A may be synchronized in both cells, and base station transmissions on channel B may also be synchronized in the two cells. Transmissions of the two base stations would then be synchronized to each other: base station transmissions on channel A in the first cell would be synchronized to base station transmissions on channel A of the second cell, and base station transmissions on channel B of the first cell would be synchronized to base station transmissions on channel B of the second cell. Such synchronization would not necessarily require base station transmissions on channel B to be synchronized to base station transmissions on channel A. Synchronization of plural channels is neither inherent in base station-to-base station synchronization, nor suggested by Gilbert.

The Office Action does not provide any rationale supporting the conclusion that synchronization of plural base stations necessarily leads to synchronization of plural channels. The undersigned attorney is also not aware of any logic and sound scientific principle that would support this conclusion. If reliance on logic or scientific principle is asserted in support of the rejection, “evidentiary support for the existence and meaning of that theory must be provided.” MPEP § 2144.02 (citing *In re Grose*, 592 F.2d 1161, 201 U.S.P.Q. 57 (CCPA 1979)). The Office Action does not provide such evidentiary support.

Note further that Gilbert uses synchronization to reduce co-channel interference, not cross-channel or adjacent channel interference. Co-channel interference is generally understood as interference due to transmissions on the same channel. *See, for example*, Wikipedia, available online at [http://en.wikipedia.org/wiki/Co-channel\\_interference](http://en.wikipedia.org/wiki/Co-channel_interference) (“Co-channel interference is interference from 2 different radio stations on the same frequency”). It stands to reason that the benefit of synchronization in reducing co-channel interference is derived from synchronization of transmissions/receptions of the same channel, not different channels.

Applicants respectfully submit that Gilbert does not disclose or suggest synchronization of frames across plural channels, and therefore Gilbert does not render claims 1, 6, 11, and 16 obvious.

Independent claim 5 recites the step of “switching channels based on received media access protocol messages so as to receive data bursts on plural channels.” Independent claims 10, 15, and 17 recite identical or similar limitations. In rejecting claims 5, 15, and 17, the Office Action cited Gilbert at column 10, lines 18-20; at column 13, lines 4-18 and 51-59; and Figures 7 and 8. By way of explanation, the Office Action noted that “Gilbert discloses system parameters are monitored in order to adaptively and dynamically change the channel time slot ratio based upon the varying bandwidth requirement.” Varying slot ratio is not the same as switching channels. According to Gilbert’s invention as it is explained throughout that document, “[t]ime slots are flexibly and dynamically allocated for uplink or downlink transmissions depending upon the bandwidth needs of a channel.” Gilbert, the Abstract; *see also id.* col. 4, lines 50-65; and *id.* col. 13, lines 4-13. Indeed, the time slot ratio is varied/configured “over a given channel.” Gilbert, col. 8, lines 11-14. Thus, in Gilbert, allocation of the time slots is varied between uplink and downlink transmissions over a

given channel – the same channel – to accommodate varying bandwidth needs. Gilbert does not disclose switching channels based on received media access protocol messages so as to receive data bursts on plural channels.

Independent claim 10 recites a transceiver that can dynamically switch between plural TDMA channels between the base station and the CPE, and a controller for controlling the transceiver, wherein based on received media access protocol messages, the CPE switches the channels so as to receive data bursts on plural channels. These limitations are similar to those discussed above in relation to claims 5, 15, and 17. In support of the rejection of claim 10, the Office Action cited Gilbert, Figures 7 and 8; and col. 11, line 16, through col. 13, line 3. The undersigned attorney has reviewed Gilbert, and specifically the cited portions, but has not been able to identify a disclosure of switching between plural TDMA channels so as to receive data bursts on plural channels.

Applicants respectfully submit that claims 5, 10, 15, and 17 are patentable over Gilbert at least for these reasons.

The above discussion addresses rejection of all independent claims. As regards the previously-rejected dependent claims not specifically discussed, these claims should be patentable together with their base claims and intervening claims, if any.

New Claims

New claims 18 and 19 should be patentable because the art of record does not disclose or suggest combinations of steps as recited in these claims. Support for the limitations in the new claims 18 and 19 can be found, for example, in the specification, at page 7, lines 20-25; page 9, lines 8-13; and in Figure 2.

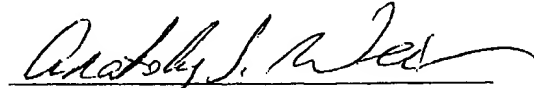
**CONCLUSION**

For the foregoing reasons, Applicants respectfully submit that all pending claims are patentable over the cited references. To discuss any matter pertaining to the present application, the Examiner is invited to call the undersigned attorney at (858) 720-9431.

Having made an effort to bring the application in condition for allowance, a timely notice to this effect is earnestly solicited.

Respectfully submitted,

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